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ABSTRACT

Drawing from a review of the literature, existing studies of accountability in other states, and the experiences of four California community colleges that are developing local accountability systems, this six-part guide offers ideas and suggestions for community college educators who wish to design accountability systems that will increase institutional productivity and effectiveness. Chapter 1 presents background information on the accountability movement in California and reviews its relevance to community colleges. Chapter 2 defines accountability and describes principles and criteria for designing an accountability system and selecting indicators. Chapter 3 describes the Chancellor's Accountability Program for California Community Colleges, presenting 19 indicators suggested for statewide accountability reporting, and comparing the advantages and disadvantages of using selected indicators. The indicators listed correspond to student access, success, and satisfaction; staff composition; and fiscal conditions. Chapter 4 presents a framework for designing an accountability system, offering options at basic, intermediate, and advanced levels. Chapter 5 discusses the major issues in selecting indicators and implementing an accountability program. Chapter 6 provides a checklist of key recommendations for designing an effective accountability system. Appendix A presents descriptions of pilot accountability plans developed by four community colleges' chosen by the Chancellor's Office to serve as model sites (i.e., Mt. San Antonio College, San Joaquin Delta College, San Jose/Evergreen College District, and Santa Barbara City College). Appendix B provides a list of resources on accountability. (PAA)

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California Community Colleges

Office of the Chancellor

IMPROVING IT

Accountability By Design

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PREFACE

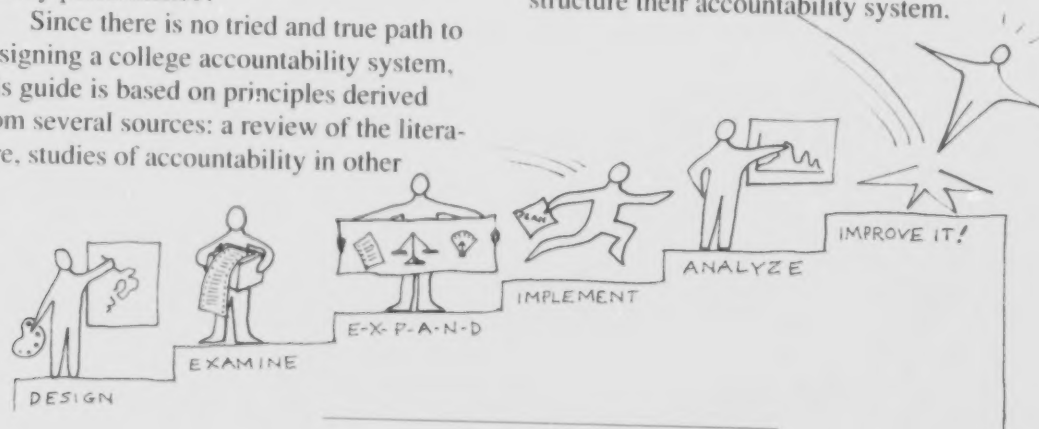
As financial support for public institutions of higher education have broadened on the state level, policymakers want more assurances that their investments are yielding an adequate return. As a result, schools and colleges are increasingly held accountable for student performance, school effectiveness, and fiscal soundness.

Educators agree that community colleges should be held accountable. They have legitimate concerns, however, about which measures will be chosen and how they will be used. Will they lead the college to focus on overly narrow aspects of education? Will they be used inappropriately in judging faculty performance?

Since there is no tried and true path to designing a college accountability system, this guide is based on principles derived from several sources: a review of the literature, studies of accountability in other

states, and the experiences of four California community colleges that are developing local accountability systems.

This guide offers ideas and suggestions for community college educators who wish to design accountability systems that will increase institutional productivity and effectiveness. Users are encouraged to view accountability as an opportunity to prove to themselves and others what their institution is accomplishing and to design ways to monitor and ensure continued success. The guide does not prescribe requirements; rather, it raises issues for community college staff to consider when deciding how to structure their accountability system.



EXECUTIVE SUMMARY

This guide contains six chapters which highlight key issues and processes involved in developing a locally useful accountability system for community colleges.

Chapter 1 presents a brief background and rationale for the accountability movement in California and its relevance to community colleges.

Chapter 2 defines accountability and describes principles and criteria for designing an accountability system and selecting indicators.

Chapter 3 describes the Chancellor's Accountability Program, presents 19 indicators suggested for statewide accountability reporting, and compares the advantages and disadvantages of using selected indicators.

Chapter 4 presents a framework for designing an accountability system at three levels: basic, intermediate, or advanced.

Chapter 5 discusses major issues and dilemmas in selecting indicators and planning and operating an accountability program.

Chapter 6 presents a checklist of key recommendations for designing an effective accountability system.

Appendix A presents detailed descriptions of four community colleges' plans for developing local accountability systems.

Appendix B suggests resources that might be helpful to community college personnel in developing their accountability system.

ACKNOWLEDGEMENTS

The authors of this guide wish to thank the members of the State Accountability Study Group of the Office of Educational Research and Improvement (Washington D.C.) for their helpful report, *Creating Responsible and Responsive Accountability Systems*, and Peter MacDougall and Jack Friedlander of Santa Barbara City College for their thoughtful paper, *A Proposed Accountability Model for California's Community Colleges* (see Appendix B). We admit to shamelessly paraphrasing useful ideas and concepts as needed from these two sources.

We wish to express our gratitude to Mark Fetler of the Chancellor's Office of the California Community Colleges for his insights and suggestions that helped shape the guide's content.

Thanks are also due the project coordinators and staff at the four community college pilot sites (see Appendix B) for their generosity in providing us with essential information about their accountability projects; and to the members of the Accountability Consultation Task Force (see Appendix C) for their help in identifying

several key issues and their review and feedback on our draft.

Finally, we wish to thank David Sibbett who inspired the graphic figures, Deanne Stone and Joan McRobbie whose editing helped make this guide more readable, and Fredrika Baer who transformed everything into a finished product.

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BACKGROUND

Accountability is not a new concept in education. Historically, the public has always been concerned with what students are taught, how effective the educational system is, and how much education should cost.

Recently, however, policymakers and the public have become more concerned with the quality of American public education. Following a series of national and state reports in the 1980s that portrayed U.S. education as a system in crisis, states have begun to hold institutions more accountable for student achievement and success. Forty-three states now require K-12 districts to submit information that is published annually in a system-performance report card. California is a leader in this new accountability movement.

California is also one of nine states requiring an accountability system for the two-year public colleges. All nine have developed a series of system indicators for the colleges focusing primarily on fiscal health. But California will also measure more complex institutional elements such as student satisfaction and institutional effectiveness.

Reform for the California Community Colleges began with the passage of Proposition 13 in 1978. In assuming funding responsibility for local districts, the state increased its scrutiny of the community college budget and raised concerns about both educational quality and accountability. Studies by the California Business Roundtable (1984) and Little Hoover Commission (1985) also recommended changes in governance, mission, faculty status, and funding.

The most thoroughgoing of the studies, "The Challenge of Change" (Commission for the Review of the Master Plan), laid the groundwork for the 1988 Community College Reform Act (Assembly Bill 1725). The bill designates the community college system as postsecondary education where top priority is given to student transfer, vocational education, and remediation. AB 1725 shifts the funding base from enrollments to costs. This is more in line with the University of California and the California State University system. And it gives authority for developing the standards and criteria for systemwide funding to the community college system itself.

AB 1725 also requires implementing a statewide accountability system for community colleges that assures the Chancellor's Office and the Legislature that the colleges are achieving their mission and providing equal access and high quality educational opportunities to their students. As a result, a dual system of local and state level accountability is being developed. The Chancellor's Office has identified 19 indicators suggested for use in statewide reporting; the colleges are expected to develop additional indicators for their local use. Primary audiences for the Chancellor's accountability report (aggregated data) are the Board of Governors, the Legislature, and the Governor. Local accountability reports are intended to be used by local trustees, administrators, faculty, staff, and students. Linkages between the two programs will ensure an effective strategy for improving the performance of the entire community college system.

The Chancellor's Office will provide annual accountability reports (disaggregated data) to each local district. The Chancellor will also maintain a clearinghouse containing information about exemplary local practices and programs and provide technical assistance on planning and implementation to those colleges that request it.

Since the emphasis of AB 1725 is on local accountability, colleges will have a great deal of latitude in designing systems

that best meet their specific goals. Thus, information provided to the state should reflect the assessment criteria and measures that individual colleges actually use.

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DESIGN CONSIDERATIONS

An accountability system should be designed to serve the information needs of both the state and the institution. The state needs data that allows it to assess whether the systemwide mission of community colleges is being achieved. The institution must be able to determine where and how to improve teaching, learning, and support services.

A. Basic Definitions

Accountability means that specified goals or outcomes are supposed to be achieved, and that people throughout the institution are responsible for achieving them. People must not only follow set procedures, put in time, or make valiant efforts, but they must actually produce desired results. Success or failure — both individual and institutional — should meet with predictable and sure consequences.

An *accountability system* provides information about the extent to which college policies and practices are achieving their intended objectives. Data collected should help college staff strengthen programs and services. Indicators or measures

included should be based on agreed standards of achievement, focused on enabling college personnel to better manage the institution, and integrated into the college's existing decision-making mechanisms.

Accountability indicators are information or statistics that reveal something about the condition or performance of an institution. These are the basic building blocks of an accountability system. To qualify as a performance indicator, data must be a *benchmark* or gauge that shows how effectively the system is meeting specific performance standards, goals, or objectives. Not all statistics fit that definition. A school's enrollment total, for example, tells the system's size but reveals little about how well the system is functioning. On the other hand, knowing the proportion of students who have successfully completed advanced courses in mathematics or in vocational training can help one assess the level of student achievement. This benchmark provides considerable insight into the condition of the system and can be appropriately considered a performance indicator.

As indicators are developed for an accountability system, community college

An accountability system should be designed to serve the information needs of both the state and the institution.

administrators and faculty must determine *who* will be held accountable, *for what*, and *to whom*. For example, scores on subject-matter tests may be designated as an indicator of student performance. Then individual faculty or departments can be held accountable for teaching students a specific curriculum.

Accountability indicators are often classified as **context**, **input**, **process**, or **output**. *Context indicators* describe key conditions affecting the educational environment of the college (e.g. demography, business needs, economic conditions). *Input indicators* describe key people and resources (e.g. knowledge and skills of incoming students, funding, local, state and federal policy). *Process indicators* describe the college's key functions, operations, and activities (e.g. management, services, communication, curriculum, instruction, special programs). *Output indicators* describe key goal-related accomplishments or end-products (e.g. jobs, transfers, economic development, student satisfaction, fiscal stability).

B. Design Principles

A successful system must collect data that shows how the college ensures student access, success, satisfaction, as well as staff diversity and fiscal soundness. To develop such a system, the following design principles should be observed:

- **Make the purpose of the accountability system clear and develop consensus among all stakeholders.**

Clearly communicate what the system is expected to accomplish. Who is responsible for what? How will data be used? What purposes will the system serve? Develop consensus among the board of trustees, administrators, faculty, and students in establishing performance and improvement goals. Develop a useful model that facilitates identifying indicators and measurement approaches. **Note:** The board of trustees and the college's top management must fully understand all that a serious accountability system entails, from finding resources and technical expertise, to trial and error in making it work, to committing to use its results.

- **Ensure that college staff find an internal use for accountability data beyond state reporting requirements.**

Aim to develop a system that serves local needs by informing the college staff's assessment, planning, and decision-making activities. Help faculty and staff view the system not as an unwelcome or irrelevant intrusion from the state, but as an essential tool for informing their own decisions and activities. **Note:** Board members, CEOs, and other top administrators need to understand

Community college administrators and faculty must determine who will be held accountable, for what, and to whom.

Clearly communicate what the system is expected to accomplish. Who is responsible? How will data be used? What purposes will the system serve?

the importance of good accountability reports to the effective and efficient operation of a community college. Their value ranges from helping comply with the law to improving management and policy decisions.

- **Develop a comprehensive and long-range plan for implementing the accountability system.**

Once consensus is reached about the system's purpose, develop a long-range plan for the design and implementation of the various system components, e.g. performance indicators, MIS, desktop access, user interfaces, report formats, etc. Then allocate sufficient resources, and allow enough time to develop and implement the system and its components. **Note:** The accountability function needs to be organizationally located where tough questions can be asked and completely answered. Avoid assigning it to departments that face irresistible pressures to give simplified, self-serving answers.

- **Select indicators compatible or coordinated with systemwide goals.**

Strengthen the connection between external accountability reporting and college improvement activities by linking community college systemwide goals to the college's programs and activities for achieving those goals.

Ensure that the Chancellor's Accountability Program and other state level reporting requirements are consistent and coordinated with the college's data needs so that the process is less burdensome and more useful to administrators and faculty. Collect data that addresses the needs of the Chancellor and those of administrators and faculty for assessing institutional, program, and student performance.

- **Use as many indicators as are practical.**

Collect data using the maximum number of indicators that are practical to provide a holistic and integrated picture of the college environment. In addition, break down each student-related indicator by sex, ethnicity, and other relevant factors so that the performance and needs of different groups can be assessed and monitored.

- **Establish an independent body to monitor the development and implementation of the performance accountability system.**

Form an oversight or advisory group of key stakeholders to: (1) communicate clearly the purposes and rationale for the system; (2) monitor its technical quality, including student outcomes; (3) assess system effects on improving educational practices and curricula; and (4) recommend

Strengthen the connection between external accountability reporting and college improvement activities by linking community college systemwide goals to the college's programs and activities for achieving those goals.

needed changes to the local board of trustees or the Chancellor's Office.

- **Make college accountability data public and tailor performance reports to different stakeholders.**

Provide public disclosure that makes performance assessments understandable to various stakeholders — state policymakers, trustees, faculty, students, community members, and the media. Place data in context and use non-technical language and graphic displays that help audiences understand trends, progress, and outcomes. Provide thoughtful analysis and reporting of the range of possible data interpretations whenever needed.

- **Make the accountability system cost effective and keep the response burden low.**

Implement an accountability system that is within the college's budget and that does not strain staff skills in data collection, analysis, and use. (**Note:** The experiences of the accountability pilot sites suggest that data collection needs to be built into the existing processes rather than being separate labor-intensive activities.) Reduce the response burden by coordinating local accountability needs with those of the state. Ensure that the information needs of the

institution and the state are met, but minimize the amount of data collection required.

C. Key Design Decisions

As local accountability systems are developed, key design decisions will be needed to ensure: (1) the relevance of data collected by colleges, and (2) coordination between colleges, the Chancellor's Office, and state agencies in the reporting of these data. The key design decisions are:

- What will the indicators be?
- At what level will data be collected?
- How will data be aggregated and reported at each level?
- What mechanisms will be used for reporting?
- *What will the indicators be?* Accountability system designers must decide how many and what types of indicators to use. These decisions, in turn, determine what information will be available to college staff, the board of trustees, the Chancellor's Office, and state policymakers.

A large number of indicators provides decision makers with a greater array of measurements about the effectiveness of the institution's educational activities and offers

more entry points for improvement actions or policies.

But data collection can be expensive and burdensome, and the system itself can become unwieldy. Therefore, system designers should select the optimal number of indicators, i.e., collect enough information for valid oversight and improvement without requiring a disproportionate investment of time or resources.

Designers must also decide what data about the larger community is pertinent to the local college. This usually means collecting background information about students and their communities, e.g. about student mobility, socioeconomic status, gender, age, ethnicity. These data enable college decision makers to anticipate the difficulties the college or district may face in educating its students, purchasing materials, or providing instructional services.

- ***At what levels will data be collected?*** The level at which data is collected influences how much data will be needed and, in some cases, its usefulness.

If, for example, the college wants to use performance data to assess the learning of *individual students*, data must be collected in every curriculum area on every student. But to assess *programs or departments as a whole*, the college can use sampling strategies. **Note:** In sampling, remem-

ber that data can be aggregated upward but not downward. That is, data sampled at the department level can usually be used to describe the institution as well, but data sampled at the institution level will not provide adequate information about specific departments and certainly not about individual students or faculty.

- ***How will data be aggregated and reported at each level?*** Critical design decisions involve how college performance data will be reported for internal use and for the state. Although the college may not choose to release all possible combinations of its performance data, it must decide whether and how to report on selected indicators.

A college may choose to report all or most of its accountability data to state agencies; or it may keep a low profile, reporting only those data requested. Each strategy has its consequences.

Many policymakers believe that publicizing performance reports on all colleges would trigger considerable public pressure for improved student achievement and success. On the other hand, it might lower staff morale and enrollment in those colleges reporting poor performance. Since colleges will make efforts to look good on whatever indicators are made public, decisions about which indicators to report are as

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The level at which data is collected influences how much data will be needed and, in some cases, its usefulness.

significant as how they will be reported. The college and the state should agree on what indicators to report and how to report them. They should also anticipate how to avoid unintended and undesirable effects.

- ***What mechanisms will be used for reporting?*** Administrators must carefully select the best means and formats for reporting performance data to various stakeholders — faculty and students, the Chancellor's Office, state agencies, and public media. For example, accountability reports can be produced in a variety of print or electronic forms. Opportunities for reporting performance data at local, regional, or state meetings or conferences can be anticipated and planned for. Formats for reporting data (symposia, research papers, formal reports) can be designed and tailored to the needs of external audiences (for publicity promotion, status or oversight review) and to internal audiences (for program review, improvement planning, student advising).

These design decisions will shape the form and content of a college's accountability system. They can make implementation more feasible, generate more resource support, and lead to greater institutional effectiveness. But to achieve such desired ends, decisions need to be worked out cooperatively between local colleges, the

Chancellor's Office, and various state agencies in accordance with the current political context and policies.

D. Criteria for Selecting Indicators

In designing an accountability system for local use, college staff need to think about the kinds of indicators to include. Six general criteria can be used. Indicators should:

- Measure the core features of the institution
 - Measure student outcomes that are actually intended
 - Provide information that is timely and relevant to policy
 - Focus on the college site
 - Allow for fair comparisons
 - Maximize the usefulness of data
-
- ***Measure the core features of the institution.*** Accountability systems have traditionally focused on educational inputs (e.g. per student spending) and outputs (e.g. student course completion). Such information can indicate whether educational conditions are getting better or worse but provides little insight into why particular trends exist or how to fix problems or replicate successes. For example, placement tests can show that

incoming students have poor math and writing skills. But they do not help college administrators and faculty answer basic questions such as: Are current remedial courses and instructional resources adequate to redress math and writing deficiencies? Which instructional strategies are most effective for remediation?

Accountability is a blunt tool unless policymakers, educators, and the public have information that allows them to pinpoint the likely sources of a problem or clues about how to fix it. So a system needs to do more than simply collect testing data. It should aim to provide an integrated picture of the college environment by including data on fiscal and other resources, faculty, campus organization, curriculum, and the distribution of various student outcomes (success, satisfaction) for different groups of students (gender, age, ethnicity, socioeconomic status).

- **Measure student outcomes that are actually intended.** Effective accountability does not require that colleges assess student performance on all or even most of what is taught. But it does require that its measures reflect the core of what is taught. Unless the measures used to assess student performance include actual skills and content covered in the curriculum,

colleges will be held accountable for areas and skills they do not cover. Regardless of the means used to assess student performance, colleges need to ensure that what is assessed matches what is taught.

- **Provide information that is timely and relevant to policymakers.** Accountability systems should describe educational conditions of concern to trustees, state agencies, and legislators and that can be changed by policy decisions. For example, characteristics of vocational programs are relevant to state policy because they can be changed through legislation or regulations governing curriculum. On the other hand, data about faculty attitudes and interaction with students may contribute to a comprehensive picture of schooling and help plan staff development, but it cannot easily be acted upon by state or local policymakers. Accountability data must also be timely and produced on a schedule that is compatible with policymakers' decision cycles.
- **Focus on the college site.** Accountability programs must collect data that individual campuses can use to interpret their educational performance and make informed decisions on development or improvement strategies. This criterion is

Accountability is a blunt tool unless policymakers, educators, and the public have information that allows them to pinpoint the likely sources of a problem or clues about how to fix it.

Accountability systems should describe educational conditions of concern to trustees, state agencies, and legislators and that can be changed by policy decisions.

A critical measure of an accountability system is whether it provides information readily understood by a broad audience.

No matter how valid and reliable any single indicator may be, it cannot be interpreted independently of others that reflect the institution's overall educational context.

particularly important to districts with multiple campuses that differ in their student composition, organization, or leadership styles.

- **Allow for fair comparisons.** Given the differences in student backgrounds and skills and in a college's resources to address those differences, administrators must report fairly any comparisons between groups of students. The challenge is to reflect and explain differences among and between groups of students without stereotyping or lowering expectations for any students.
- **Maximize the usefulness of data.** A critical measure of an accountability system is whether it provides information readily understood by a broad audience. Data must be organized and reported in a way that is useful not only to college administrators and faculty, but also to boards of trustees, state policymakers, the press, and the general public.

These six criteria apply when designing local accountability indicators, no matter how those indicators are defined or used. All six must be met if the accountability system is to produce information that is accurate, reliable, fair, and useful for improving the institution's programs and activities.

E. Looking at the College as an Integrated System

One aspect of an accountability system is implied by the word *system*. No matter how valid and reliable any single indicator may be, it cannot be interpreted independently of others that reflect the institution's overall educational context. An obvious example is student achievement trends. No conclusion can be drawn about changes in student achievement over time without information about other factors, such as changes in student characteristics, curricula, student access, student persistence, or faculty composition.

To avoid reporting information that is disjointed or fragmented, college staff must present data in a way that reflects the integration of educational system elements. An integrated model that portrays the college's educational system may be either simple and intuitive or more complex. **Figure 1** is a simple model that shows the relationship between system inputs, processes, and outputs within the educational environment of the community college. Because it makes linkages among system elements, this model can serve as a general framework for thinking about, organizing, and reporting accountability data.

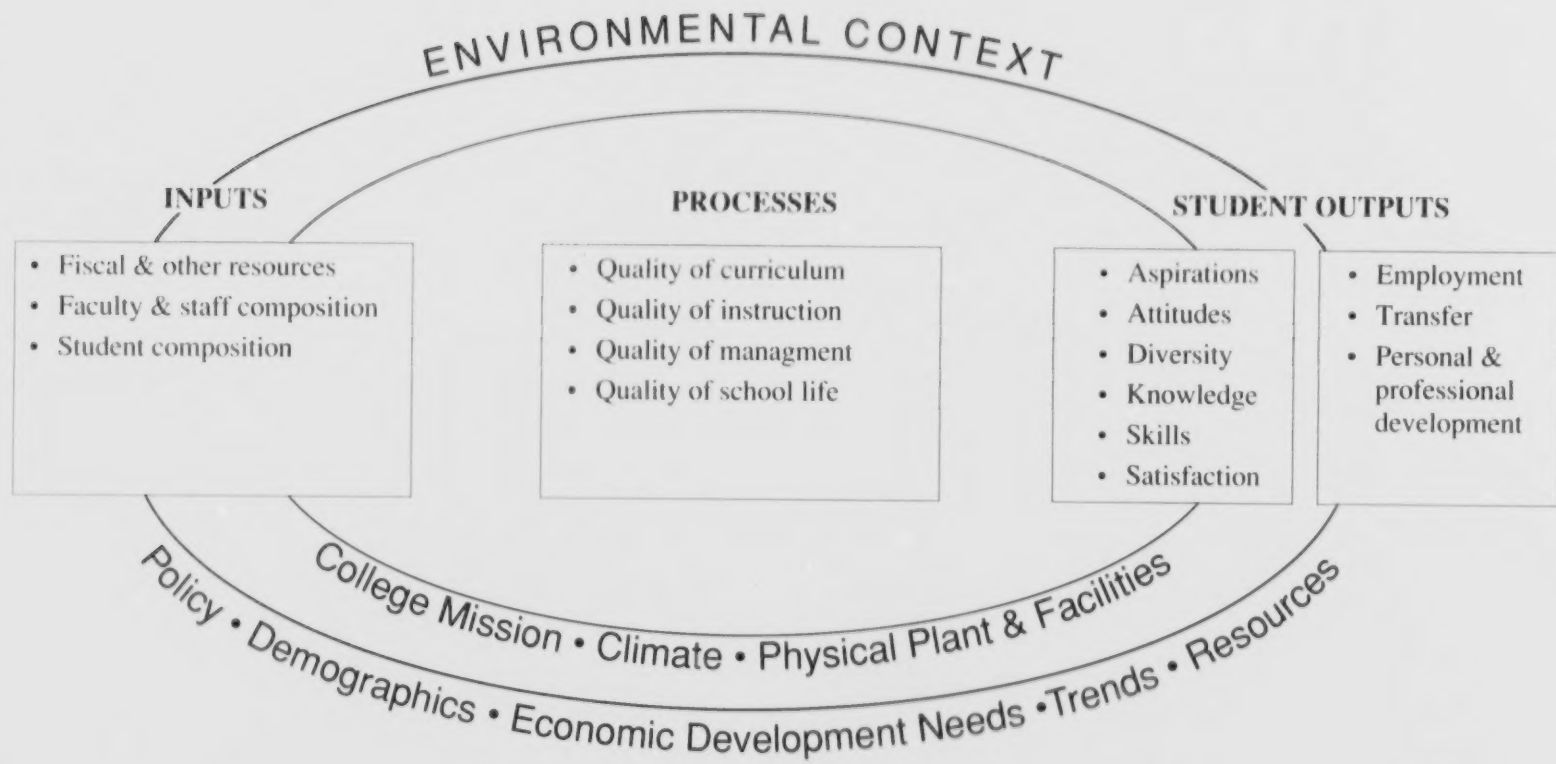


Figure 1:
A Systems Model of the Community College

3

ACCOUNTABILITY FOR CALIFORNIA'S COMMUNITY COLLEGES

One of the most politically sensitive decisions that state and local colleges can make is how to analyze and use accountability data. How will colleges be compared? How will the data affect the allocation of funds? Clearly there is a national trend toward comparing public school performance. But making such comparisons fair for community colleges is complex. Ultimately, local colleges, the Chancellor's Office, and various state agencies need to work out some agreement on how statewide accountability data will be used by policymakers.

A. Statewide Data Collection

Accountability information useful for external reporting and internal assessment and decision making must be valid, reliable, and timely. The dissemination of high quality information can strengthen program credibility, provide further opportunities to improve quality, and ensure program longevity.

Two main sources of data for the statewide accountability system are the

Management Information System (MIS) and periodic studies. The Chancellor's Office and local colleges recognize that too many competing demands by external agencies could hinder the development of local accountability systems. For this reason, the Chancellor's Office will use only a subset of local colleges' MIS data for statewide accountability reporting.

State Management Information System. The Chancellor's MIS will be the primary data collection engine for the statewide system. The goal for this MIS is to provide uniform and coordinated gathering of objective data by all districts and colleges with a minimum of redundancy or burden. Accordingly, a database is being developed on community college students, programs, courses, staff, services, finance, and facilities. Development is proceeding in three main phases, each preceded by a MIS pilot program. Three of the four districts participating in the accountability pilot (see **Appendix A**) are also involved in the MIS pilot program.

The Chancellor's Office is committed to the success of the MIS and to making

Accountability information useful for external reporting and internal assessment and decision making must be valid, reliable, and timely.

good use of the funds provided for its development and operation. The Chancellor's Accountability Program is intended to extend the usefulness and impact of the statewide MIS by encouraging each college to develop its own MIS and use the resulting information to set goals, conduct planning, and allocate appropriate resources for educational change and improvement.

Statewide periodic studies. The Chancellor's Office plans to contract with outside consultants to conduct longitudinal and focus studies portraying how well the community college system is doing as a whole. A special accountability task force created by the Chancellor's Office recognized that the office needed to collect some information not available in the MIS. For example, the state needs periodic surveys of student transfers, student satisfaction, and job placement so as to compare these data over time. Districts and colleges will have the option of voluntarily augmenting such studies with their own locally useful ones.

Figure 2 shows the relationship between the local colleges' and statewide accountability systems.

B. Chancellor's Accountability Indicators

The Chancellor's Accountability Program is calling for quantitative and qualitative assessment in five areas: student access, student success, student satisfaction, faculty diversity, and fiscal condition.

Statewide findings on key indicators in the five areas will be reported annually to the Board of Governors, the Governor, the Legislature, the Postsecondary Education Commission (CPEC), other interested public or private agencies, and the public. The statewide results will be simultaneously reported to local districts and colleges for use in their accountability programs. The Chancellor's accountability reports will focus on systemwide improvement over time, but will avoid comparative rankings of colleges.

Under the Chancellor's Accountability Program, each community college will be responsible for collecting information on a sample of indicators that describe key performance areas of their institution. Nineteen indicators are being considered; these form a subset of the MIS data collected by each college. Information from these indicators will be used by the Chancellor as leverage in securing continued funding and resource support for the community college system. Changes in the definition or number of indicators will be subject to consultation as requested by the Chancellor.

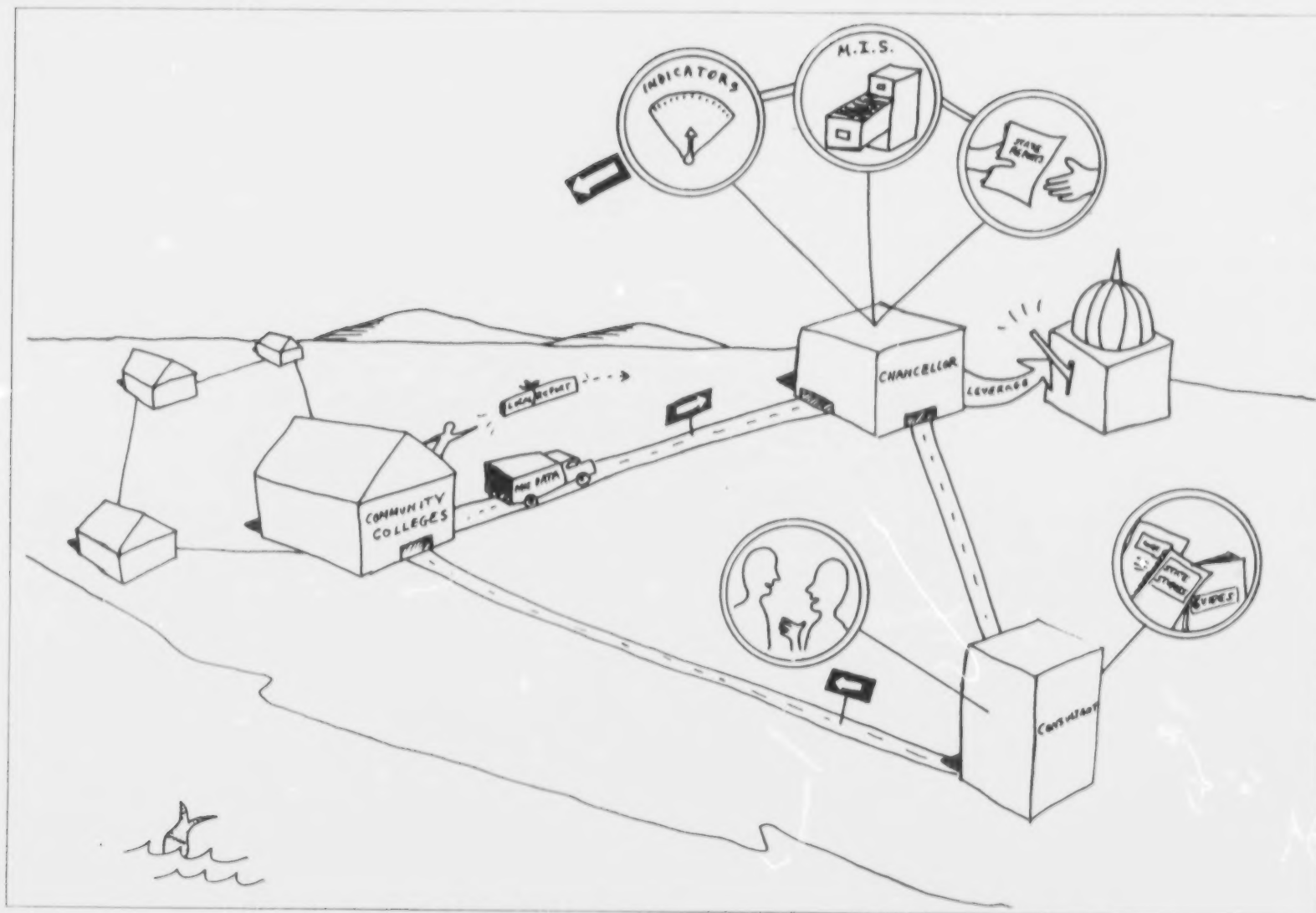


Figure 2: Relationship between Local and Statewide Accountability Systems

Student Access Indicators

1. **General participation.** The number of students enrolling in the community college is a basic measure of access and has implications for the volume of resources needed to provide adequate levels of service.

Type of indicator: Context.

Ways to display data: Number of students enrolled by gender, ethnic group, high school graduation status (recent graduate or not), age group, and term.

Data source: MIS.

2. **Transition from high school.** The percentage of high school graduates enrolling in the fall or spring immediately following graduation is useful information for planners of articulation programs. It is also a leading indicator of the eventual total number enrolling.

Type of indicator: Context.

Ways to display data: Number of high school graduates enrolled by term, gender, and ethnic group.

Data sources: MIS. California Department of Education for statewide graduation counts.

3. **Financial aid.** The number of students receiving aid and the amount of aid received (in dollars) per student are important indicators of access to financial

assistance. **Note:** Not all students who need aid apply for it. There is no commonly accepted definition of what constitutes need.

Type of indicator: Input/process.

Ways to display data: Aid recipients by source (federal, state, local) and type (grant, loan).

Data sources: MIS. Periodic studies for detailed student need information.

4. **Categorical programs.** The number of students served and average expenditure per student in categorical programs are measurements of educational assistance to students. **Note:** As yet, there is no commonly accepted objective definition of educational need or way to measure the amount of unmet need.

Type of indicator: Process.

Ways to display data: Number of students served by gender, ethnic group, and program (including EOPS, DSPS, matriculation, and CARE).

Data sources: MIS. Chancellor's Office reports. Periodic studies.

5. **Basic skills and ESL enrollment.** The number of students enrolled each year in basic skills and ESL courses affects the overall level of student skills at a campus and the quality and nature of instruction provided.

Type of indicator: Context/process.

Ways to display data: Student enrollment by gender, ethnic group, and course.

Data sources: MIS. Chancellor's Office reports.

Student Success Indicators

6. **Persistence.** The number of students enrolled for two consecutive fall terms indicates commitment to a longer-term educational goal and to meeting specified requirements for a certificate, degree, or transfer.

Type of indicator: Outcome.

Ways to display data: Number of students persisting toward a certificate, degree, or transfer by gender and ethnic group.

Data source: MIS.

7. **Completion.** The number of students each year who complete an associate degree or certification.

Type of indicator: Outcome.

Ways to display data: Number of students obtaining a degree or certificate by gender, ethnic group, and age. Distinguish between degree or certificate. For certificates, distinguish two year, one year, and less than one year. **Note:** Other equally valid student programs and outcomes relate to vocational preparation, transfer, English Second Language (ESL) or basic skills, and noncredit (Adult Education).

Data sources: MIS for number of awarded degrees.

8. **Completion by field of study.** The number of students who initially seek an associate degree in specific fields of study and attain their goal within two, three, four, or more years of initial enrollment.

Type of indicator: Outcome.

Ways to display data: Number of students obtaining an associate degree by gender, ethnic group, years needed, and major field (humanities, social or behavioral sciences, natural sciences, computer sciences, engineering, or business). Distinguish between general education and vocational majors.

Data sources: MIS. Periodic studies to track degree completion at other colleges.

9. **Transfer.** The number of students who transfer to the University of California or California State University system within two, three, four, or more years. Completion of English 1A or intermediate algebra is considered to be evidence of commitment to transfer. **Note:** The validity of student self-reports of matriculation goals is often questioned.

Type of indicator: Outcome.

Ways to display data: Number of transfer students by gender, ethnic group, and years needed.

Data sources: MIS. Periodic studies.

10. Job placement. The number of students placed in jobs or who achieved job advancement within six months of degree or certificate award.

Type of indicator: Outcome.

Ways to display data: Number of students placed in jobs by gender, ethnic group, and major field. Include student self-assessment of relevance of training.

Data source: Periodic studies.

Student Satisfaction Indicators

11-15. Student expectations and satisfaction with the community college experience. Student expectations and satisfaction are assessed for each of five areas: (1) access, (2) instruction, (3) instructional services, (4) student services, and (5) facilities, before, during and after attendance at the college.

Type of indicator: Outcome.

Ways to display data: Student satisfaction by gender and ethnic group.

Data source: Periodic studies.

Staff Composition Indicators

16. Staff diversity. The number and percentage of staff in each gender, ethnic and age group, the date of hire, and Equal Employment Opportunity (EEO-6) job category demonstrate staff composition that affects campus climate — particu-

larly for underrepresented students — and commitment to affirmative action.

Type of indicator: Process.

Ways to display data: Number and percentage of staff by gender, ethnic and age group, date of hire, and Equal Employment Opportunity (EEO-6) job category.

Data source: MIS.

17. Faculty time assignment. The number and percentage of faculty working full-time and part-time provide a measure of instructional climate stability and increased professionalism.

Type of indicator: Process.

Ways to display data: Full-time and part-time faculty by gender and ethnic group.

Data source: MIS.

Fiscal Condition Indicators

18. Community college funding. The overall level of funding adjusted for inflation from federal, state, and local sources provides a measure of the support and commitment of government to the community college.

Type of indicator: Input.

Ways to display data: Funding adjusted for inflation by source (federal, state, local) both as a total and by Average Daily Attendance (ADA)/Full-Time Equivalent Student (FTES). Funding for Chancellor's Office operations adjusted

for inflation.

Data sources: MIS. Other fiscal data.

19. Fiscal stability. The number of districts rated at fiscal risk.

Type of indicator: Input.

Ways to display data: Number of districts at high, medium, or low fiscal risk by fiscal quarter.

Data source: Fiscal Services Unit (Chancellor's Office). The Chancellor's Office will determine indicator performance from fiscal data submitted by individual colleges.

These 19 indicators are being considered as a minimum set for reporting under

the Chancellor's Accountability Program. There are, however, other equally valid performance indicators which college administrators and faculty may select for internal assessment and planning purposes.

C. Advantages and Disadvantages of Specific Indicators

Specific indicators selected for accountability inevitably have advantages and disadvantages. An assessment by MacDougall and Friedlander (1990) illustrates some tradeoffs in selecting specific indicators.

Specific indicators selected for accountability inevitably have advantages and disadvantages.

Student Success	
Indicators Based on Tracking of Student Progress:	
• Job placement and performance • Transfer rates	
Advantages	Disadvantages
• Excellent measure of student outcomes • Efficient when in place, e.g. community college transfers • Can have minimal impact on staff/resources if state management information system (MIS) in place • Uniform data collection • Allows strengths/weaknesses to be identified • Periodic survey data can be used to assess effectiveness of corrective measures	• Can be very costly, e.g. vocational placement follow-up • Students moving from college to college hinders tracking • Requires significant data-processing/MIS support and expertise • Requires cooperation of agencies and individuals outside the control of the college • Allows for inter-institutional comparisons that may be misleading and could lead to uniformity • Can be a peripheral activity, i.e. not connected to the faculty and staff responsible for the programs

Indicators Based on Curriculum Tests: • Measures of general student learning • Value-added comparisons of scores on a pre-test versus a post-test	
Advantages • Objective • Efficient method for collecting data • Allows for inter-institutional comparisons • Valuable in conducting longitudinal studies • Recognized as a valid measure of achievement	Disadvantages • Costly to use • Difficult to administer • Low motivation for students to take tests • Weak relationship of test to the curriculum • Problems of interpretation of results, i.e. out-of-course influences, ceiling effect • Difficult to control for differences in courses taken • Tests may be measuring general intelligence and reading skills • Tests too firmly connected to abstract verbal facility
Student Satisfaction	
Indicators Based on Student Self-reports: • Alumni satisfaction • Student satisfaction • Personal and intellectual development	
Advantages • Can collect data easily on measures of satisfaction and progress toward achieving education objective • Can be coordinated with institutional programs • Relatively inexpensive to administer • Can be a source of institutional renewal • Allows for longitudinal assessment	Disadvantages • Credibility is low • Inter-institutional comparisons are very difficult • Problems in validating locally developed instrument • Generally limited to perceptions of attainment rather than measures of content mastery
Student Access/Success	
Indicators Based on Factual Data • Demographic information • Population served • Accredited programs • Performance on licensing exams (nursing, radiology, etc.)	
Advantages • High credibility • Allows for inter-institutional comparisons • Easily interpreted • Can assess broad changes over time	Disadvantages • Scope limited, i.e. only relates to specific programs/measures • Factual data from external sources, e.g. census, may not conform to district definition

D. Linking Accountability to Assessment and Planning

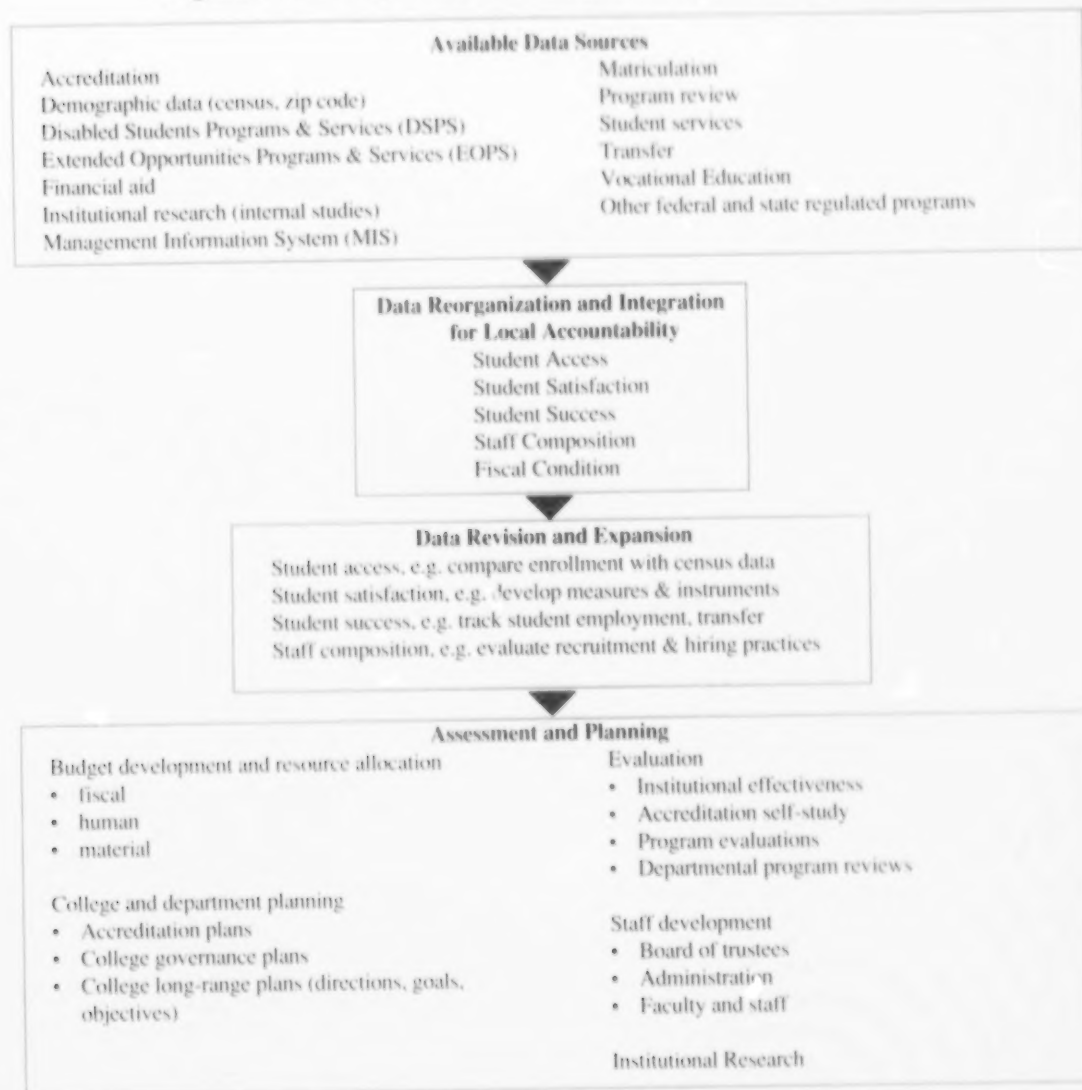
An accountability system cannot be treated as an add-on program driven by external regulations or requirements. Rather, it must be developed primarily for local use. Such a system should be the engine that drives the institution toward ongoing change and improvement.

California's community colleges already collect information that can be integrated into an accountability system. It would mean pulling together the different internal and external information requirements into a system that enables the institution to make comprehensive and effective assessments of how it is doing.

Figure 3 shows how an accountability system can be linked to assessment and planning activities at a local college.

Accountability should pull together the different internal and external information requirements into a system that enables the institution to make comprehensive and effective assessments of how it is doing.

Figure 3. Linking Accountability to Assessment and Planning



4

DESIGN FRAMEWORK AND OPTIONS

Not all community colleges are equally ready to implement a complex or advanced accountability system. They may differ considerably in vision, staff commitment to accountability, information-gathering capability, available resources and technology, or coordination between institutional review and planning. Accordingly, the following design framework suggests ways that colleges at different levels of *readiness* can begin designing and developing an accountability system that will meet both local and state needs.

The framework describes five key areas for designing an accountability system: *vision, information, technology, infrastructure, and linkage*. For each key area, three levels of system development are described — *basic, intermediate, and advanced*. Differences among the three levels lie in the degree of sophistication and use of accountability data by college administrators, faculty, and students. For example, a basic system is driven by external compliance and oriented toward use by managers, while an advanced system is driven by internal college needs and oriented toward serving a larger pool of constituents. Likewise, tech-

nology in a basic system is often inaccessible to staff and students, whereas an advanced system's technology provides user-friendly access to information by all who need it.

This does not mean that an advanced system necessarily requires state-of-the-art technology. Rather, in an advanced system, information from computer printouts to hand-generated graphs will be circulated and used by the broadest range of college participants for planning and decision making.

What drives an accountability system is the vision of how it will be used — a vision that is developed and conveyed by leaders of the college. If they view accountability as yet another reporting requirement, then they will favor a basic system. On the other hand, if leaders envision a system for long-term internal use, they will want to develop a more advanced system.

It is likely that each community college will develop a system that combines basic, intermediate, and advanced-level components. For example, a college might have a long-range integrated vision of accountability (intermediate or advanced system), but

Colleges at different levels of readiness can begin designing and developing an accountability system that will meet both local and state needs.

What drives an accountability system is the vision of how it will be used — a vision that is developed and conveyed by leaders of the college.

could also have limited technology (basic system). By contrast, a college could elicit widespread support from stakeholders (intermediate or advanced system) without developing a real vision or plan of how the system will be linked and effectively utilized on campus (basic system).

This framework is intended to suggest useful entry points for designing and developing a local accountability system appropriate to serving community college needs. As the system develops and matures from a basic to a more advanced one, a college should find its data more useful for institutional quality assessment, improvement planning, and resource allocation.

FRAMEWORK FOR DESIGNING AN ACCOUNTABILITY SYSTEM and System Development Options

	BASIC	INTERMEDIATE	ADVANCED
VISION Provides leadership, philosophy, goals, and definitions for the overall accountability system (who it will serve, how it will work)	- Choice of accountability indicators determined more by external reporting requirements - Information access and services geared primarily for administrator use	- Choice of accountability indicators driven equally by external and internal information needs - Information access and services geared for administrator and faculty use	- Choice of accountability indicators driven more by internal information needs - Information access and services geared for administrator, faculty, and student use
INFORMATION Provides performance indicators, data measures, data sources	- Provides data on required accountability indicators for external reporting and a limited number for internal assessment - Little integration or consistency between indicators for external reporting and internal assessment - Little consistency or coordination of data gathering and analysis among divisions and departments	- Provides data on expanded number of accountability indicators for internal assessment - Moderate integration between indicators for external reporting and internal assessment - Better coordination of data gathering and analysis among divisions and departments	- Provides data on large number of indicators for institutional monitoring and improvement at all levels - Greater refinement of indicators; sophistication and efficiency in data collection strategies - Maximum integration between indicators for external reporting and internal assessment - High level of coordination of data gathering and analysis among divisions and departments
TECHNOLOGY Provides for development of MIS, computer hardware/software, user interfaces, data processing and analysis, data reporting formats	- Reliance on central mainframe or mini-computer - Administrator access to information provided through desktop microcomputers - Use of computer information limited by complicated user interfaces - Non-standardized but sufficient microcomputer software (wordprocessors, databases, spreadsheets, graphics)	- Desktop access to information extended to faculty - Increasing use of computer information facilitated through user-friendly interfaces - Progressing standardization of microcomputer software	- Desktop access to information extended to students - Extensive use of computer information by faculty facilitated through staff development - Complete standardization of microcomputer software with significant cost effectiveness - Sophistication in tracking, data gathering, and data entry (e.g. via bar code technology, scanners, computerized survey forms, etc.)

**FRAMEWORK FOR DESIGNING AN ACCOUNTABILITY SYSTEM
and System Development Options (cont'd.)**

	BASIC	INTERMEDIATE	ADVANCED
INFRASTRUCTURE Provides consensus, support, and participation of stakeholders; provides for availability of people, facilities, funding, and other resources	• Adequate administrator support but little faculty support or participation • Limited use of personnel (part-time, temporary) for institutional research, data processing and analysis • Accountability not a primary job responsibility • Data research conducted on a reactive basis according to emerging need or demand • Data gathering effort and response burden high, but cost fairly low	• Strong administrator support with moderate faculty support and participation • Full-time institutional research and data processing departments • Accountability a primary job responsibility of selected individual(s) • Data research conducted on a proactive basis according to anticipated but shorter term needs • Data gathering effort and response burden moderate, but cost is higher	• Strong administrator and faculty commitment and participation • Accountability an integrated part of institutional life • Representative stakeholders serve as committee to provide oversight and quality control for accountability activities • Proactive data research based on anticipated and longer-term needs • Efficient data gathering and minimized response burden, but cost is high
LINKAGE Provides tie-in of accountability data to quality control, program review, improvement planning, and resource allocation (i.e. as incentives or consequences)	• Inconsistencies between divisions or departments in use of accountability data for program review and improvement planning • Little or no use of resources as incentives for applying accountability data in improvement planning	• Accountability data used regularly and consistently by divisions and departments for program review and improvement planning • More frequent use of resources as accountability incentives for improvement planning	• Sophisticated use of accountability data in program review, strategic planning, and curriculum, instruction and student services improvement • Extensive use of resources as accountability incentives for improvement planning

5

IMPLEMENTATION ISSUES

A community college district will encounter many thorny dilemmas in both designing and implementing an effective accountability system. By definition, accountability is a complex process that must consider the relationships among a diverse group of actors, the elusive process of teaching and learning, and the specific responsibilities of different groups involved in the college. Although accountability is not a new concept in education, it is in its infancy with respect to definition of terms, delineation of boundaries, refinement of processes, and precision of measures. Therefore, administrators and faculty must be committed to continuous diagnosis of their college and constant re-examination of the appropriateness of chosen indicators.

With the emphasis in California on local accountability, districts may discover that the proposed 19 statewide indicators do not allow a comprehensive picture of their local college. Since community colleges are complex institutions with complex missions, administrators and faculty can expect the systems they design to require constant refinement.

The dilemmas and issues that follow reflect the experiences of **four pilot site districts** (see **Appendix A**) that are developing accountability systems for their campuses. Some problems are common to all four while others are specific to a single campus. These colleges' collective experiences, however, should help others anticipate problems that might arise in developing and implementing their own accountability systems. Suggestions for resolving issues raised are offered for the reader's consideration; they are not intended as prescriptions.

A. Vision

Leadership. A strong accountability system requires strong leadership. College leaders must be committed to its value and importance. Leadership is key in developing an appropriate vision of the accountability process. Leaders must pose essential questions: Who is responsible for what? What is to be accomplished? What necessary resources will be made available? How will the institution know if goals have been met?

Technological Leadership. A strong accountability system requires developing

Accountability is a complex process that must consider the relationships among a diverse group of actors, the elusive process of teaching and learning, and the specific responsibilities of different groups involved in the college.

A strong accountability system requires strong leadership.

computer technology, and key technological personnel need vision and leadership. Rather than viewing their role as guarding or supplying information for a privileged few, these staff have to link technology to real institutional needs and provide data that is timely and comprehensible.

Focus of System. In designing an accountability system for the community colleges, administrators and faculty should be aware that different focuses produce different systems. A *request-focused system* responds to external demands for information. In this system, a few technical staff in the institution provide the data required for various reports. Little emphasis is placed on informing all faculty or the larger college community. In a *management-focused system*, information is accessible to administrators only. A limited number of managers have access to the data needed to make decisions concerning changes in curriculum, student services, or the allocation of resources. In a *need-focused system*, information is viewed as vital to the empowerment of students, faculty, and managers. The underlying assumption is that the institution is more effective when data is readily available to all and participation in the college's development includes all stakeholders.

Different focuses produce different systems.

Access to information is vital to the design of an effective accountability process.

B. Information

Access to Information. Access to information is vital to the design of an effective accountability process. In an *open system*, important data would be shared with all sectors of the campus because information is viewed as important to all the members of the college community. A *closed system* makes information available only to the top layers or key decision makers of the institution. These two approaches create different definitions of accountability because groups not included in the information-access loop cannot be held accountable for decisions that are made.

Information Technology. In a *closed system*, only a few decision makers understand the information technology (such as computer hardware and software). In an *open system*, technology is viewed simply as the means to more accurate decision making and a more fully informed constituency. Two such different approaches have implications for how technology is designed for a college and how accessible it will be.

Relevance of Data. Community colleges presently collect a vast amount of data which they more often use to reflect on what has already happened rather than to anticipate what comes next. Administrators and faculty have to ask themselves the tough question: Are we collecting data the institution really needs? It is not easy to collect

appropriate information, synthesize it, and present it in a clear, accessible form to a non-technical audience.

Ethics and Confidentiality. Information needs to be shared in a way that does not breach confidentiality or breed unproductive forms of competition. For example, a college might choose to provide data on individual faculty success and retention rates within a department to improve the department as a whole, but it would not necessarily share this kind of data with students or other departments. These decisions will depend on the intent of the accountability system — goals, chosen indicators, open versus closed-access policy.

Accuracy of Data. Lacking agreement on definitions, community colleges use different terms to analyze the institutional effectiveness of different functions and audiences they serve. One common example is the term transfer, which is defined differently by different colleges. There are currently at least nine definitions of transfer; hence, colleges tend to use the one most favorable to them. To remedy this situation, the community college system as a whole needs to agree on common definitions and data-collection processes.

Campuses will need to carefully examine and refine their strategies for collecting accurate data, particularly for that collected through standardized forms (such as admissions). For example, if 60 percent of enroll-

ing students wrote "undecided" as their academic matriculation goal, or if students did not answer the question seriously, then the resulting data would not accurately reflect whether students had met their goals by the end of their tenure at the campus.

Qualitative Data. The goal of an accountability system is to create an accurate picture of the community college as a whole. To do so, schools will need to determine when and how to use both qualitative and quantitative methods. Although external reporting (through the MIS) for the state requires quantitative data, in some areas qualitative data could significantly contribute to a more accurate and dynamic accountability system. Because collecting qualitative data is labor-intensive, it is important to discern the areas in which it is most needed.

Value-Added Approach to Data Collection. Besides establishing data collection routines, campuses might need to consider developing a "value-added" approach to integrating the accountability system with college review and planning processes. For example, new regulations require colleges to determine the hours students spend with counselors. Rather than ask students or clerks to log these hours, a visionary programmer at one pilot site developed a computerized program in which students could schedule counseling appointments at various computer terminals on campus. This

The goal of an accountability system is to create an accurate picture of the community college as a whole. To do so, schools will need to determine when and how to use both qualitative and quantitative methods.

enabled the college to collect the data while also improving the scheduling process.

Statewide Comparative Data. Districts want access to data about institutions similar to themselves. They could use this information to find out how similar programs in other colleges are doing. But comparative information could also be used competitively to judge institutional effectiveness and allocate resources.

C. Technology

Management Information System (MIS). The relationship between the individual community colleges and the state MIS system is still confusing. Districts need further technical assistance concerning what data is available on the MIS system and how to make it more accessible to their campuses.

Incompatibility. Nonstandard hardware and software and computer incompatibility within a campus and among different colleges make it difficult to transmit data within and between colleges. The cost of expanding the computer capabilities of individual colleges is also a concern. Currently, funding is not available to develop the necessary user-friendly interfaces for genuine data accessibility. Moreover, it is costly to retrieve data from mainframe computers. At present, there is not adequate

or cost-effective technology to easily link mainframe and microcomputers.

Data Presentation. Transforming raw data into user-friendly forms is a challenge. An accountability report or presentation must have elegant simplicity rather than technical complexity. Reporting must also be tailored to a specific audience.

D. Infrastructure

Stakeholders. Who should be included in the accountability loop? This is a complex question. A narrow definition of stakeholders can limit the effectiveness of the accountability process. It may overlook, for example, the role of students and community members. Present systems of institutional accountability do not necessarily include these two groups in a systematic way, yet they are integral to the mission of community colleges. Most administrators would agree that buy-in and participation of campus stakeholders is desirable. Colleges will differ, however, about who to include and to what degree information should be shared. Some colleges will place token students on planning committees, while others might use existing student organizations to co-develop studies on areas of concern to students, such as student satisfaction.

Resistances. Districts want to protect an already overworked administration and

An accountability report or presentation must have elegant simplicity rather than technical complexity.

faculty. They recognize that administrators and faculty will balk at demands to collect additional data. To overcome a natural resistance to accountability demands, districts should explain that the information demands generated by the process will replace requirements already in place.

Views differ on the value and use of the accountability system. A *status quo* approach views it as mainly compliance with external demands for information not tied to the college's everyday decisions. A *proactive* approach sees accountability mechanisms as the basis of the college's decision-making — particularly on issues such as resource allocation or program and curriculum planning. In this view, accountability genuinely informs the daily operations of the college and contributes to its institutional effectiveness.

E. Linkage

Consequences. Genuine accountability must consider rewards and sanctions. What should be the institution's response to success or failure? Will successes be openly rewarded and failures openly sanctioned? At issue is how to shift accountability from a process of documenting failure to one of truly improving the institution. The local college must address how accountability affects the reward system, allocation of resources, application of sanctions, and

integration of these things into college policies and practices.

Another concern is how accountability data will be used by the college, and ultimately, how it will affect members of the college community. The data can reveal the adequacy or effectiveness of key aspects of the college ranging from administrative operations to physical plant to departmental programs. Administrators must explain from the beginning what the rewards and sanctions will be for individuals and departments. Only when the accountability process becomes precise and fair can its findings be used to reward or sanction individual as well as institutional performance.

Compliance vs. Internal Use. Reporting must be seen as a tool clearly linked to internal decision making. If viewed solely as complying with the demands of external agencies, such as the legislature or the Chancellor's Office, then there will be no impetus to make links to such vital institutional activities as planning and resource allocation. To be motivated to invest enough time to develop an effective accountability system, institutional stakeholders must perceive such a system as central to the health of their college. They must be convinced that the system will not be burdensome to operate and that it will help them function better.

A proactive approach sees accountability mechanisms as the basis of the college's decision-making — particularly on issues such as resource allocation or program and curriculum planning.

Genuine accountability must consider rewards and sanctions.

6

RECOMMENDATIONS

A clear and comprehensive accountability program should reflect the ideas presented in this guide as summarized in the following checklist.

Key Design Principles

- Clarify the purpose of the accountability system and develop consensus among all stakeholders.
- Use accountability data for internal planning and decision making.
- Develop a long-range plan for the design and implementation of the accountability system components.
- Select indicators that are compatible with systemwide goals.
- Use as many indicators as are practical.
- Establish an independent group to monitor accountability system performance.
- Make accountability data public and understandable to various stakeholders.

Key Design Decisions

Decide:

- The type and number of indicators to be used.
- At what institutional levels the data will be used.
- How the data will be aggregated and reported for internal use and for the state.
- The appropriate formats for reporting data to various stakeholders.

Criteria for Selecting Indicators

- Measure the core features of the institution.
- Measure outcomes that are actually intended.
- Provide information that is timely and relevant to policymakers.
- Focus on the college site.

Recommendations

- Allow for fair comparisons.
- Maximize the usefulness of data.

Implementation Issues

Vision

- Develop active leadership to design the accountability system, from top administrators to technical personnel.
- Decide what the focus of the accountability system will be (i.e. request, management, or need focused) and the degree to which constituents will be involved in its planning and operation.

Information

- Clarify who will have access to the data and how access will be provided.
- Clarify the kinds of data the college needs for ongoing improvement.
- Clarify how data will be shared with participants in ways that respect considerations of ethics and confidentiality.
- Develop quantitative and qualitative measures to capture the dynamic aspects of community college life; identify the

areas in which qualitative data is most needed.

- Design a "value-added" system that generates needed information as well as other benefits, e.g. desktop access, individualized information query, coordination of planning activities.
- Develop *systemwide* data collection processes that ensure accurate information for statewide reporting in areas such as student transfer.*
- Develop *statewide* consensus about how accountability data will be used, i.e. what kinds of comparative data will be obtained and what degree of access colleges will have to it.*

Technology

- Clarify the relationship between the college's accountability system and the Chancellor's MIS and develop processes to access statewide MIS data for local use.*

* These statewide implementation issues are included only because community colleges will need to be involved in their resolution.

- Standardize computer hardware and software to facilitate sharing data within the college.
- Develop methods to access data stored in the college's mainframe or central computer.
- Allow adequate time for such things as graphics development that can transform data into forms easily read and understood by non-technical people.

Infrastructure

- Clarify and communicate how the demands generated by the accountability process will add to or replace existing requirements.
- Clarify and communicate how the accountability system will benefit participants and help the institution function better.

Linkage

- Clarify and communicate how accountability will affect the reward system, the allocation of resources, the application of sanctions, and the development of new policies and practices at the college.

A Powerful Tool

An accountability system can be a powerful tool. It can provide data, particularly outcome measures, which influence the thinking of faculty, administrators, and the community. But this tool is only as good (or bad) as its design and implementation. The most effective systems are periodically revised to reflect advances in technology and shifts in the political context. By continually working on ways to link accountability systems to institutional assessment, planning, and improvement, California's community colleges will ensure assessment and planning that reflect the richness and diversity of their institutions.

The most effective systems are periodically revised to reflect advances in technology and shifts in the political context.

APPENDIX A PILOT SITE PLANS

As part of the Chancellor's accountability program, four California community college districts were selected as pilot sites to develop accountability systems for their campuses. The pilot effort serves three purposes: (1) to develop accountability systems specifically for local use; (2) to publish guidance materials and provide technical assistance for colleges designing their own systems; and (3) to help the Chancellor's Office streamline reporting relationships with community colleges by clarifying its own requirements and developing written prototype reports based on those done by the pilots.

Each pilot district has developed a different strategy to fulfill both state requirements and specific local needs. Some colleges have focused on all five areas of the AB 1725 accountability model (student access, success, satisfaction, staff composition, fiscal condition). Others decided to master two components in the first year before proceeding. This included developing appropriate indicators and data collection routines as well as understanding how to use and report the data. Some sites took an incremental, add-on approach to developing

a local accountability system. Others worked toward a broader vision of creating effective linkages between accountability and longer-term institutional planning.

The plans of the four pilot sites are organized under the five key areas of the accountability design framework introduced in Chapter 4 — *vision, information, technology, infrastructure, and linkage*.

1. Mt. San Antonio College

Vital statistics

Mt. San Antonio College is a large, single-college district on a 420-acre campus located 30 miles east of Los Angeles in Los Angeles County. It serves approximately 32,000 students (46% White, 28% Hispanic, 11% Asian/Pacific Islander, 8% Black, 1% Native American, 2% other). Two-thirds are enrolled in credit classes; one-third in non-credit. Hispanics are the fastest growing group, followed by Asian/Pacific Islanders and Filipinos.

Vision

Accountability goals. The college wants to develop a viable accountability system for local use. Administrators and faculty share the goal of educating college staff to accept feedback and evaluation. They agree that timely and relevant data could improve department and college decision making and planning.

Accountability strategy. The college's strategy is to develop multiple accountability projects for all campus programs and services. Its approach is "diverge and then converge" — simultaneously implement 30 projects in the state's five accountability areas, then in the next few years evaluate which projects will be continued.

Information

Overall strategy. The directors of research and information services assessed existing campus data to determine what information could be used to develop the local accountability model and what new data was needed. Approximately 85 percent of needed data are now available on the college MIS. The college has used quantitative methods for all five accountability components. Qualitative data reflecting student access, satisfaction and success, and staff composition will be gathered by new survey instruments being developed by

faculty, staff and students. Forty-eight credit and non-credit student services staff have prepared student satisfaction surveys for their areas in consultation with their counterparts at other community colleges. Surveys to evaluate hiring procedures have been completed by personnel staff.

MIS data. The college is one of five pilot MIS campuses. It will be providing 100 percent of the data elements designated for phase I of the MIS development process by fall 1991 and reporting on 52 percent of the phase II data elements by June 1991. Staff are currently reviewing the phase III data elements with hopes of submitting data by fall 1991.

Technology

Overall strategy: (1) To make data collection more efficient by using state-of-the-art technology such as student I.D. bar codes and scanners to support attendance accounting, matriculation tracking, and survey data; (2) To make data more accessible on microcomputers by developing and acquiring necessary hardware and software.

State-of-the-art computer system. The Information Services department encompasses computer services, technical services (telecommunications) and media services (video). On-line systems operating on an IBM 4381 mainframe attend to external reporting requirements, expedite class

scheduling, develop budgets and keep personnel and part-time faculty payroll records. Personnel/payroll records are also kept on the Los Angeles County Superintendent of Schools computer system. The county is developing a communications line so that the college can transmit personnel/payroll records without tape processing. With this line, the college will also be able to get income and expenditure data needed for MIS phase III. This is a fully networked system with over 400 users.

The administrative computer information system currently keeps permanent historical records dating back to September 1968 for over 623,000 students. On-line are records of student admission, touch-tone registration, and fees, as well as enrollment figures for courses and services.

The system has other on-line capabilities: degree audits to verify completion status; student placement test scores for 14 major test types; verification of student course eligibility; calendar for scheduling and monitoring student appointments for counseling and testing services; student financial aid processing; student tracking and reporting; career guidance for students; daily updating of enrollment/attendance statistics with prior year comparison; test scoring service for instructors; and history of grades for students.

Computer terminals are available to administrators and will eventually be in-

stalled in all faculty offices. The college is using SAS software (a computer language capable of interfacing with the Chancellor's MIS) and scanners to expedite getting survey data on-line. It is also expanding automated data collection to help with consistency and to free person hours for the ongoing collection of qualitative (anecdotal) data.

Infrastructure

Commitment and support. The director of research and the director of information services are in charge of the project. The administration is committed to it, and the faculty senate voted unanimous support and participation in the project. Representatives from the administration, faculty senate, and student organizations oversee progress.

Staffing. The director of research and the director of information services have given this accountability system priority. Two consultants were hired to assist. Other key staff include: the superintendent/president, vice president of instruction and student services, vice president of business services, director of personnel, dean of student services, director of special projects and grants, coordinator of staff development, and the president of the faculty senate.

Institutional research. The research department consists of a full-time director of research and a full-time support staff mem-

ber. Besides large-scale studies (in areas such as student transfers, community demographics, matriculation, and enrollment trends), the department publishes a two-page monthly bulletin called "Insights" which is distributed throughout the campus. Topics include: ethnic distribution of students, longitudinal comparison of educational goals, analysis of degrees and certificates by gender and ethnicity.

Linkage

Linkage strategy. Data from the accountability system will enable the college to evaluate how well it has achieved its mission. The college developed a strategic plan in 1987, which was reviewed and modified in 1990. The plan includes 12 strategic goals and numerous college-wide objectives which will be reviewed annually. A planning system has been established which involves trustees, staff, faculty, and students. All campus programs and services will eventually become fully aligned with the college's mission and strategic plan.

Program review. The college is currently re-examining its program review process. Because the process has been "administratively driven," faculty participation across departments and divisions is inconsistent. Previously, the program review process consisted primarily of an analysis of uniform quantitative data supplemented with

subjective evaluation. This information was used to determine which courses were scheduled and how resources for supplies, equipment and staffing were allocated. Past reviews were used to expand, decrease and, in some cases, eliminate programs. Included in the college's primary objectives for 1991-92 is the development of a formal program-review process. The college plans to use accountability data in planning and development to improve the curriculum and the effectiveness of the instructional program.

Issues and concerns

Vision. The college is beginning to develop a broad vision of accountability as a means to greater institutional effectiveness. Trustees, the faculty association, faculty senate, department chairs, managers, counselors, educational advisors, student government, and campus committees received the project proposal and progress reports for review and discussion. A series of focus groups will meet to review the results of the pilot evaluation projects to determine which measurable indices of institutional effectiveness will be developed for the final model.

Faculty participation. Although research findings have contributed to administrators' decision making, faculty have used research services and reports only as needed. As the faculty senate president said, "Data is not really dealt with unless there is a

pressing issue being raised." The faculty are focused on more immediate issues (such as courses, contracts and negotiations) and will need to be educated on ways to use the accountability model as it progresses.

Reporting. Accountability project results are briefly summarized and presented graphically in an easy-to-read format similar to the "Insights" research bulletin.

High-response burden. Reducing and coordinating external agencies' data requirements could lessen the response burden. The college has an effective data-collection system and a wealth of data available for analysis. The problem is, how can the unsophisticated end-user access data? The MIS staff is capable of producing standard reports, even phototyping new reports, but the system is not capable of producing *ad hoc* reports answering any question the end-user may ask. The reporting systems — SPSS, SAS or COBOL — are too technical for 99 percent of the end users. This problem needs to be solved before an effective accountability system can be established.

Highlight

State-of-the-art technology. The college acquired an array of technology that has increased administrator, faculty, and student access to: (1) services (touchtone registration, scheduling, electronic mail, etc.), and (2) available data on the mainframe com-

puter. It is also developing efficient data-processing techniques such as scanners and computerized survey forms to limit the staff's response burden.

Commitment from key personnel. The administration and faculty senate are highly committed to developing an accountability model geared for local use.

2. San Joaquin Delta College

Vital statistics

San Joaquin Delta is a medium-to-large, single-college district. It has approximately 19,100 students (60% White, 19% Asian and other, 15% Hispanic, 6% Black), along with 234 full-time and 314 part-time faculty. Between now and the year 2005, the college expects its student population to grow by 55 percent and increase in ethnic diversity.

Vision

Accountability goals. Staff view the accountability project as an opportunity to assess their institutional effectiveness by setting up appropriate mechanisms to answer such questions as: What do we mean by effectiveness? How do we know if we are doing things well or poorly? Staff believe that: "Accurate, longitudinal data on our students and finances, and rigorous,

objective evaluation of our programs and operations are key to our developing educationally sound policies and allocating resources that advance the college's priorities."

Long range plan. The college has a five-year plan to use advanced computer technology to: (1) integrate campus databases and information systems, and (2) provide greater access and user-friendly information services to administrators, faculty, and students.

Information

MIS data. The college is one of five pilot MIS campuses. Staff believe they are in a good position to produce high-quality data for management decision making, and to test alternative report formats for many indicators in the statewide accountability model.

Matriculation data. The college is developing a comprehensive matriculation system, including touchtone registration, that interfaces with an on-line student-registration database, automatically checking for prerequisites and course eligibility. When completed, the matriculation system will electronically record students' educational programs, including course plans and recommended services. It will also track students who have a course plan to find out what services they use and whether they achieved their goals. Counselors will have

terminals at their desks that will enable them to enter information about students.

Acquisition of special databases. As part of its institutional research, the college has acquired special population and zip-code databases. These have permitted the administration to project population, enrollment, and ethnicity (key indicators for assessing student access) beyond what is available from the state Department of Finance (DOF). Analyses of these data have been disseminated to faculty, staff, and trustees, and these reports are a key part of current planning for enrollment increases and facility expansion.

Staff-composition data. The college has compiled 10 years of data on gender and ethnic composition of staff and is ready to analyze these data and establish regular trend reports.

Student information system. A comprehensive student information system is being developed. When completed, it will provide access through the college's network of personal computers to current and longitudinal data on students' characteristics, goals, courses, and performance. Parts of this system are in place, and the data are being used to evaluate and modify the college's educational programs and services.

Technology

Computer services philosophy. The goals of computer services are to: (1) increase access to information, make things easier, deal with people's most important needs first, and solve problems; (2) provide an advanced information-technology environment that does not require the user to be technically proficient but, instead, makes all information available in a standard, friendly format.

State-of-the-art computer system. A plan is being implemented to put the entire campus on a Macintosh computer network providing access to the student information system and other administrative databases. This computer system will increase the use of accountability data and reports at all levels of the college.

Computer services support. The following computer services are part of the college's five-year technology plan: (1) developing an electronic network to tie together every office on campus for sharing of information, peripherals, electronic mail, and access to applications on the larger computer systems; (2) integrating campus matriculation, research, business, and payroll systems; (3) using relational-database technology and human-interface tools to make information manipulation and data querying flexible and easy for campus research needs; and (4) creating loan-a-Mac

and staff-development programs to enable faculty to become computer literate and familiar with various software applications.

Infrastructure

Board commitment and support. The board of trustees passed a resolution expressing its interest in the value of accountability data, its intention to be closely involved in project work, and its anticipation of using improved data in managing the college.

Project staff. A broadly based, high-level committee has been set up to oversee project work. Staff, faculty, and students are represented. The executive assistant to the president, the director of institutional research and planning, the dean of general education, the director of computer services, the director of finance, and the assistant director of guidance have also been assigned to the project.

Financial support. The college spends approximately two-to-three percent of its overall budget on MIS technology, including salaries for data-processing staff. This percentage is not expected to change even with the recent five-year development plan. **Note:** Delta staff suggests that a college needs to spend only a small percentage of its budget on technology if it is done wisely. This means that the system should not be dependent on good old boys who do not

share information and who do not have up-to-date programming skills or knowledge of technology. Delta staff also believes that data-processing managers who make faculty and administrators beg for information and data and who always claim they need more money and resources to provide new information and services are the wrong people for the job.

Institutional research. The office of institutional research conducts studies that provide objective accountability data on the school's operations. Recent ones looked at faculty salaries, the effects of student ethnicity on educational choices and outcomes, long-term population and enrollment projections, nursing admission standards, the compensation of confidential employees, and the overall state of the college.

Linkage

Campus-wide planning system. The college established a planning system that involves trustees, staff, faculty, and students. Using this system, staff have developed a mission statement for the college, a set of institutional goals, and a large number of unit-level objectives for annual evaluations. These objectives and their evaluations are entered into a special on-line database which is accessible via the college's personal computer network. The planning system is considered an essential mechanism in

providing priorities and focus for using accountability data.

Program review. Each instructional program at the college is reviewed every four years. The program review collects information on a program's objectives, curriculum, faculty, enrollment trends, job market needs, demographic and outcome data on students, cost effectiveness, and facilities and equipment. The computer services department is assisting the instruction office in developing a mechanism to download information from the financial and student information systems to provide data for program reviews.

Issues and concerns

Adequacy of standards. Administrators believe that the staff composition component of the AB1725 accountability model does not adequately address the important dimensions of instructional quality and staff performance. Initially administrators and faculty will be occupied collecting data and developing useful accountability reports on selected standards and indicators. But after some successes in implementing the accountability program, they believe their system must be expanded to include indices of instructional quality and staff performance.

Limitations of qualitative measures. Qualitative judgments and evaluations have

limited accountability value. For the Western Association of Schools and Colleges (WASC) accreditation reports, for example, accreditation teams are not comparable, there is limited time or opportunity for observation, and assessments are subjective. Delta staff considers it desirable, where feasible, to develop more quantitative and objective measures for the WASC reports.

Note: For some performance areas (e.g. student satisfaction), measures of quality are difficult to quantify objectively. For this reason, more subjective or anecdotal assessments may still be appropriate.

Identifying existing data. Having collected much of the data advocated by the Chancellor's Accountability Program, staff are in the process of finding out what is included in the data and how much of it has been collected longitudinally.

Strengthen the program review process. Several administrators believe that the program-review process is weak because it is based on self-reviews of various curriculum programs. Because of this self-serving aspect, faculty tend not to ask hard questions about the quality of curriculum, and they resist assessing the quality of their instruction. Administrators believe, however, that the accountability system will strengthen the program-review process by providing more telling and accurate data on curriculum performance. They feel certain that the

faculty's professionalism will lead them to use the data appropriately.

Highlight

State-of-the-art technology. The college has a system of networked Macintosh computers that provides access to their student information system and other administrative databases. It also gives administrators and faculty advanced data-querying capability. The college has been selected by the Apple Corporation to be part of the Apple Community College Alliance, an organization of 10 colleges with innovative computer installations.

User-friendly approach to technology. The computer services and institutional research departments have a service-oriented philosophy and system-development plan to provide easy access to data needed by administrators, faculty, and students. Under development is a relational-database system with a virtual-desk menu that contains user-friendly, intuitive icons which users can select to query and access desired information from desktop microcomputers.

3. San Jose/Evergreen Community College District

Vital statistics

San Jose/Evergreen is a multi-campus district comprising of two colleges and a district office complex. The colleges have a total enrollment of approximately 20,400 students. San Jose City College has a traditional infrastructure of divisions and departments, while Evergreen Valley College has a nontraditional structure of interdisciplinary college clusters and centers offering educational programs. Both campuses employ a total of 200 full-time and 604 part-time faculty. More than 50 percent of the student enrollment on both campuses is nonwhite, with Latinos and Asians making up 40 percent of the student body. Student growth by the year 2005 is projected to be approximately 26 percent.

Vision

Accountability goals. The district views accountability as an appropriate vehicle for encouraging: (1) increased coordination between the two campuses, (2) a more uniform agreement concerning benchmark data to be collected, and (3) stronger linkages to program review, institutional planning, and decision making.

Accountability strategy. The district's strategy is to develop two accountability reports, one prototype for the district and one for the college. These reports will be linked to district planning, decision making, and budgeting. The design for the prototype reports will be based on a conceptual framework drawn from the accountability literature and the model developed by Santa Barbara Community College. Profiles of the community, the district, faculty, staff, and students will be developed and used to answer questions about student access, student success, and staff diversity.

Information

Overall strategy. The dean of academic standards and matriculation heads a project team which is developing the accountability process for the district. First, team members will identify district goals and expectations for accountability. They have already selected several key questions which the district and college reports will address. Next, they will identify which specific indicators they will use and which outcomes they anticipate. Then the district data processing department will be asked what information it has available.

The district plans to develop 25 to 50 prototype reports and 5 to 10 district maps portraying differing information on demographic trends of importance to district

planning. It has already begun to collect data on transfer rates by discipline and for special programs. Now they are examining counseling services as well as success and retention rates in mathematics and science.

The purpose of these reports is to establish the basis for a local accountability system that provides more useful and up-to-date information for institutional planning and decision making.

MIS data. The district is one of five pilot MIS campuses and has completed phases I and II of the pilot project.

Technology

Overall strategy. Because the district presently uses two different databases on its two campuses, staff plan to develop a uniform system and make data more accessible on microcomputers. The district is beginning to centralize and standardize data with the RAMIS-II software system, a mainframe query language. Evergreen Valley College plans to hire a coordinator of campus computing who will begin to address the problem of limited access.

Infrastructure

Commitment and support. The project is directed by the dean of academic standards and matriculation and is supported by a faculty demographer/researcher who has

40 percent released time to help. The provost at Evergreen Valley College and the dean of instruction at San Jose City College are giving five percent released time to coordinate the model development at the two campuses.

Staffing. An outside contractor will develop the code for accountability reporting that allows information from demographic databases to be integrated with data elements from the district's mainframe. As access, success, retention, and diversity reporting models are developed, the contractor will be involved in training district decision makers on how to access mainframe data by using RAMIS. The report prototypes will be shared with all RAMIS users, so that they can access and plan at the college and district levels, and use data elements in consistent ways. A program assistant has been given 20 percent released time to assist in collecting and analyzing data.

Linkage

Linkage strategy. The objective is to define and standardize benchmark performance data for accountability in the three areas: student access, success, and staff diversity. This will lead to a more integrated strategic-planning process between the two campuses and the district office.

Program review. The district plans to link the accountability process to program

review. Currently, the data are too aggregated to be used efficiently at the division or department level, but the district has data adjustments planned.

Accreditation. Both San Jose and Evergreen Valley campuses will have completed their self-studies for accreditation during 1990-91 and will undergo accreditation visits during 1991-92. They will use this opportunity to examine how the model accountability system will work with accreditation and how to integrate the two processes.

Academic and student services improvement. The district recognizes the importance of having consistent, systematic linkages between accountability assessment and academic and student services improvement. But at present it lacks the necessary technology. The external demand for accountability is expected to speed progress in integrating information into decisions the district must make.

Issues and Concerns

Data coordination. Administration needs to better coordinate the data between the two campuses and between divisions and departments. Access to information is restricted by both the complexity of the technology and by an information-gathering process historically used more to fulfill

external compliance requirements than for internal decision making.

Computer literacy. An increasingly important issue is computer training for administrators and staff. The RAMIS system is a very sophisticated program with inquiry protocols too complicated for many administrators and faculty to use. Consequently, the district recognizes the need for technical training. Also, a greater range of data needs to be placed in RAMIS for it to function as an accountability system.

Computer hardware/software compatibility. The present use of non-standard software for wordprocessors, databases, graphics, and spreadsheets makes it more difficult to access essential information about the two campuses. The district goal is to make a database system compatible across the two campuses and available on the desktops of administrators and faculty.

Highlight

Demographic research. The accountability project has enabled the district to concentrate extensive demographic research on issues of student access, student success, and staffing. The district serves a multi-county community which complicates demographic analysis and requires an examination of small geographic units. Data from the 1990 census is being used to examine such variables as ethnic composition —

of the district and of the San Jose City and Evergreen enrollment areas. Newly purchased software that plots census tract maps will help the district compile a series of reports and maps on issues such as success and retention by campus, ethnic group, age, and gender.

4. Santa Barbara City College

Vital statistics

Santa Barbara City College is a medium-large, single-college district with approximately 27,850 students (68% White, 21% Hispanic, 8% Asian, 2% Black, and 1% other), and 182 full-time and 515 part-time faculty. Between now and the year 2005, the college expects its student population to grow by 19 percent.

Vision

Accountability goals and expectations. The college aims to provide administrators and faculty with data that helps them make decisions about ways to improve student achievement. The challenge is to develop an accountability system that is balanced, i.e. meets state needs while fulfilling the essential purpose of improving teaching and learning. Administrators see the accountability project as an opportunity to improve existing processes and programs and to

tighten current operations: planning, program review, institutional research. They also see an opportunity to examine the five core performance areas — student access, success, satisfaction, staff composition, fiscal condition. They expect to answer questions that could not be answered before and to feed this information back into the system for appropriate change and improvement.

Information

Accountability model. The college is developing procedures for evaluating institutional effectiveness and using the results to strengthen its instructional and support services. Its institutional accountability model contains the following elements:

- Institutional self-study plan for accreditation
- Statement of institutional directions
- Department two-year plans
- Program reviews for all academic affairs and student affairs departments
- Matriculation plan
- Institutional research program
- Staff development program
- Planning process, including budget development, fiscal and physical plant plans

The primary goal of the accountability system is to integrate the college's planning

and evaluation processes into a comprehensive picture of institutional achievements. This information will help improve student learning and development.

Accountability report. College staff will develop an annual accountability report assessing overall institutional effectiveness in achieving its stated mission, goals, and objectives. The report will draw from a variety of internal and external information sources, including institutional research results, local and state MIS data, census and community planning data, program and department plans, and results of program reviews. Faculty, students, and staff will use the report to identify initiatives for program improvements. It will also serve as a focus for discussion and action by the board of trustees (the steward of district resources).

Technology

Computer information system. Administrators are working on a five-year plan for developing and operating an MIS/data-processing system that will provide information access to administrators, faculty, and students. The college envisions a network environment in which information in the mainframe can be sent through a file server linked to desktop microcomputers. A data-processing director has been hired to: (1) develop software interfaces between mainframe and microcomputers, and (2) use

databases for manipulating data, computing statistics, etc.

Bar-code technology. The college is using bar-code technology to track students' use of campus services. Student ID cards are scanned to record which students use which services and for how long. Staff are refining this system to improve use of tracking information for internal decision making. Currently, however, tracking data is used only for reporting compliance with state requirements.

Infrastructure

Institutional commitment. The college's commitment to assessment and planning led to its participation in the accountability pilot project. Many activities within the college support accountability functions, including: the annual institutional research agenda, departmental program-review activities, work on a decision-support information system, and plans to achieve new institutional directions

Project staff. The accountability project team includes the superintendent/president, two deans of academic affairs, two assistants to the president, and three full-time faculty members. These individuals have extensive experience in college planning and resource allocation, institutional research, matriculation evaluation, academic and student services program review, accreditation, and MIS development.

Linkage

The following audiences will use information from the college's accountability system:

Faculty and staff. Faculty and staff will use accountability information for assessing progress in achieving institutional and departmental goals. They will also apply the data to program reviews, reviews of progress in meeting objectives stated in departmental two-year plans, results of institutional research, and general measures of institutional effectiveness. Departments will use this information in developing plans for improvement.

Students. The college will use data from the accountability system to show students how well they are progressing toward their educational goals and what steps they can take to increase their chances of success. It will also provide data to students on course and program completion rates, college persistence rates, transfer rates, subsequent performance at senior institutions, and job attainment. They will receive information on the relationship between their use of college resources and their educational progress. In orientation and advisement programs, the data will help students with self-reflection, self-evaluation, and self-improvement.

Board of trustees. The board of trustees will receive information on faculty and staff

diversity, financial performance, facilities utilization, student achievements, and overall college performance. These data will be presented in annual institutional effectiveness assessment reports, the statement of institutional directions (SIDs), and annual progress reports on the SIDs.

Community. Community members who serve on the college's advisory committees will receive a summary of the annual institutional assessment report. They will be asked to review the program results and reports for the department in which they are involved. And they will advise the college on how to strengthen programs to better meet student and community needs.

State and Chancellor's Office. State agencies and the Chancellor's Office will receive information generated from the college's MIS, particularly on the indicators specified in the Chancellor's Accountability Program. These indicators will reveal much about the college's effectiveness.

Other community colleges. Information on indicators of student achievement and institutional effectiveness, and methods found especially useful for assessment will be shared with other community colleges. Information sharing can be accomplished through presentations to: the Academic Senate for California Community Colleges; institutional research organizations, such as Northern California Community College Research Group, Southern California

Community College Institutional Research Association, and the Community College League of California Commission on Research; information system directors; and college administrators and trustee organizations, such as the Association of California Community College Administrators, and the state Board of Governors.

Issues and concerns

Improved data processing capacity.

Administrators admit that data processing is not one of their strengths, although they are effective at such transactions as grades and payroll. They believe that the new MIS technology will improve their capacity to get needed information for planning and evaluation.

Standardization of hardware and software. The college information systems are not linked due to incompatible hardware (i.e. they have both PCs and Macs), different software, and different local area network (LAN) packages. A committee known as the department of educational technology and microcomputer support is trying to bring more control over the growth of these hardware/software systems. The committee is attempting to standardize around a single system (Nouvelle LAN). People on the system will get more attention and service than those not on it.

Faculty commitment. Developing faculty commitment and involvement is a priority where the faculty are often simply too busy. Administrators plan to raise the level of attention paid to accountability by: (1) finding more effective ways to present data to faculty during program reviews, academic council meetings, and college planning council meetings; and (2) linking performance assessment to the allocation of resources for programs and student services, thus affecting college planning.

Highlight

Systemic approach to accountability.

Project staff have initiated a multiple approach to the development of an accountability system. This mainly involves: (1) developing faculty interest and commitment to the accountability process; (2) elevating accountability so that it affects the rewarding of money, time, and material resources; and (3) using accountability data in departmental and program reviews to suggest new directions for campus development or improvement.

APPENDIX B HELPFUL RESOURCES

1. References/Documents

Accountability

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Cornesky, R. et al. *W. Edwards Deming: Improving Quality in Colleges and Universities*. Madison, WI: Magna Publications, 1990.

Deming, W.E. *Out of the Crisis*. Cambridge, MA: MIT Center for Advanced Engineering Study, 1986.

Imai, M. *Kaizen: The Key to Japan's Competitive Success*. New York: Random House, 1986.

2. Accountability Pilot Sites

- Mt. San Antonio College
1100 North Grand Avenue
Walnut, CA 91789
(714) 594-5611
Contact: Barbara Ann Hall, Director of Institutional Research
- San Joaquin Delta College
5151 Pacific Avenue
Stockton, CA 95207
(209) 474-5019
Contact: John Evans, Director of Institutional Research & Planning
- San Jose/Evergreen College District
4750 San Felipe Road
San Jose, CA 95135-1599
(408) 274-7900
Contact: John Kangas, Dean of Academic Standards
- Santa Barbara City College
721 Cliff Drive
Santa Barbara, CA 93109-2394
(805) 965-0581
Contact: Bill Hamre, Assistant to the President

3. Agencies/Organizations

- Chancellor's Office
California Community Colleges
1107 Ninth Street
Sacramento, CA 95814
(916) 327-5910
Contact: Mark Fetler, Director, Planning and Performance Outcomes

APPENDIX C ACCOUNTABILITY CONSULTATION TASK FORCE MEMBERS

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Jim Locke
President, Academic Senate for California
Community Colleges
College of Marin

Cheryl Miller
Comptroller
Citrus Community College District

Clair Parsh
President
Community College Association

Jose Peralez
Assistant Director, Human Resources
Santa Monica College

John Petersen
Executive Director
Accrediting Commission for Community and
Junior Colleges

Robin Richards
Chair, Community College League of California,
Commission on Research
Director of Research & Analysis
Yosemite Community College District

David Viar
Executive Director
Community College League of California